

# MATERIAL SAFETY DATA SHEET #1046

15885 Sprague, Strongsville, Ohio 44136-1799

**Emergency Phone:** LESCO: (800) 321-5325

CHEMTREC: (800) 424-9300

**DATE:** 2/15/01

SUPERSEDES: 3/30/00

|  | CHEMTREC: (800) 424-9300                |                      |  |                             |             |  |
|--|---|----------------------|--|-----------------------------|-------------|--|
| I. F                                       | . PRODUCT IDENTIFICATION                |                      |  |                             |             |  |
|  | Product: Iron Plus Granular & Iron Plus | Granular-Elite Che   | mical Family: Inorgan                    | ic Metal Fertilizer Salts   |             |  |
|  | Chemical Name/Synonyms: Micronutrie     | nt Fertilizer Compou | ınd                                      |                             |             |  |
| II.  | . PRODUCT INFORMATION: INGREDIENTS      |                      |  |                             |             |  |
|  | Hazardous                               |                      | THRESHOLD                                |                             |             |  |
|  | Chemical Name                           |                      | LIMIT VALUE                              | %(by wt.)                   | CAS#        |  |
|  | Iron Sulfate                            |                      | 1.00 mg Fe/m <sup>3</sup>                | 40                          | 7720787     |  |
|  | Iron Oxide                              |                      | 5.00 mg Fe/m <sup>3</sup>                | 28                          | 1332372     |  |
|  | Magnesium Oxide                         |                      | 10.00 mg Mg/m <sup>3</sup>               | 4                           | 1309484     |  |
|  | Manganese Oxide                         |                      | 1.00 mg Fe/m <sup>3</sup>                | 4                           | 1344430     |  |
|  | Magnesium Sulfate                       |                      | 10.00 mg Mg/m <sup>3</sup>               | 2                           | 7487889     |  |
|  | Manganese Sulfate                       |                      | 1.00 mg Mn/m <sup>3</sup>                | 2                           | 7785877     |  |
|  | Copper Oxide                            |                      | 1.00 mg Cu/m <sup>3</sup>                | 0.28                        | 1317391     |  |
|  | Zinc Sulfate                            |                      | 5.00 mg Zn/m <sup>3</sup>                | 0.17                        | 7733020     |  |
|  | Copper Sulfate                          |                      | 1.00 mg Cu/m <sup>3</sup>                | 0.14                        | 7758998     |  |
|  | Zinc Oxide                              |                      | 5.00 mg Zn/m <sup>3</sup>                | 0.10                        | 1314132     |  |
|  | Sodium Molybdate                        |                      | 5.00 mg Mo/m <sup>3</sup>                | 0.001                       | 7631950     |  |
|  | Inert ingredients                       |                      |  | 19-20                       | NA          |  |
| III. PHYSICAL AND CHEMICAL CHARACTERISTICS |   |                      |  |                             |             |  |
| -  | Boiling Point: NA                       |                      | Specific Gravity (water=1):              |                             | NA          |  |
|  | Melting Point:                          | ND                   | Bulk Density (lbs./cu                    | . ft.):                     | 95          |  |
|  | Vapor Pressure (mm Hg):                 | NA                   | Evaporation Rate:                        | •                           | NA          |  |
|  | Vapor Density (air = 1):                | NA                   | Percent Volatile:                        |                             | NA          |  |
|  | Solubility in Water: Approximately 50%  |                      | Appearance and Odor: Dark brown granule, |                             |             |  |
|  | pH: 4.0-6.5                             | 7.2                  |  | slight metallic odor.       |             |  |
| IV. FIRE AND EXPLOSION HAZARD DATA         |   |                      |  |                             |             |  |
|  | Flash Point (method Used):              | NA (Non-combustible  | ) Auto Ignitio                           | n Temperature:              | NA          |  |
|  | Lower Explosion Limits:                 |                      | NA Upper Explosion Limits:               |                             | NA          |  |
|  | NFPA/HMIS RATING: HEALTH                | FIRE                 | •  | ACTIVITY                    |             |  |
|  | 1                                       | 0                    | 0  |                             |             |  |
|  | Extinguishing Madie. This product is a  |                      |  | mable mesterial but mestall | :_ <b>.</b> |  |

**Extinguishing Media:** This product is noncombustible. This product is not a flammable material, but metallic fume can be released under intense heat. Use media for extinguishing fire.

**Special Fire-Fighting Procedures:** Do not wash material into any streams, waterways, drainage ditches or storm sewers, etc. Impound liquids used in firefighting to prevent entry into streams, ditches, sewers, etc.

Unusual Fire and Explosion Hazards: None known. Not an explosion hazard.

### V. HEALTH HAZARDS

Primary Route(s) of Entry: Skin, eyes, inhalation, ingestion.

### Signs & Symptoms of Exposure

Acute: Can cause moderate to severe eye irritation and mild to moderate skin irritation. Inhalation of spray may cause respiratory tract and mucous membrane irritation. Ingestion of iron sulfate symptoms include heartburn, nausea, gastric discomfort, constipation or diarrhea. Symptoms of severe poisoning may occur between 30 minutes to several hours. Severe hemorrhagic gastritis with abdominal pain, retching, violent diarrhea and vomiting may occur. Circulatory system may be affected with symptoms of shock, rapid, weak or no pulse, severe hypotension and pulmonary changes with dyspnea, and emphysema may occur. The average lethal dose of pure concentrated iron sulfate is 200-250 mg/kg body weight.

**Chronic:** Repeated exposure may cause dermatitis or conjunctivitis of eye. Reproductive effects have been reported in animals with administration of concentrated iron sulfate.

## **Emergency First-Aid Procedures**

Eyes: Flush with potable water as needed for 5-15 minutes. If irritation persists, get medical attention.

**Skin:** Remove contaminated clothing. Shower and shampoo with clean water and soap to remove all traces of fertilizer from skin and hair.

**Inhalation:** If inhaled, remove to fresh air at once and call for emergency medical assistance immediately if irritation persists.

**Ingestion:** Consult medical assistance if swallowed.

#### Iron Plus Granular & Iron Plus Granular-Elite, MSDS #1046

Page 2

Notes to Physician: In patients not in shock or coma, induce emesis with syrup of ipecac if vomiting has not occurred. Flow with gastric lavage using deferoxamine, 2 grams in 1 liter of water which contains sodium bicarbonate 20 gm/L. Leave 10 grams of deferoxamine in 50 ml of 5% sodium bicarbonate in the stomach. Maintain airway, blood pressure and respiration. Treat symptomatically and supportively. (Dreisbach, Handbook of Poisoning, 11th edition.)

The decision whether the severity of poisoning requires administering of any antidotes and actual dose required should be made by qualified medical personnel.

**Toxicity Information:** 

**Eve Irritation:** Contact may cause moderate to severe eye irritation.

|       | Skin Irritation: Contact may cause mild to moderate skin irritation.   |  |  |  |  |
|-------|--|--|--|--|--|
|       | ·  |  |  |  |  |
|       | ositive Teratogen or Mutagen Carcinogen(NTP): No Potential Carcinogen (IARC or OSHA): No   |  |  |  |  |
| VI.   | REACTIVITY   |  |  |  |  |
|       | Stability: [X] Stable [] Unstable  |  |  |  |  |
|       | Conditions to Avoid: Storage near strong alkaline materials.   |  |  |  |  |
|       | Incompatibility: Strong base materials.  |  |  |  |  |
|       | Hazardous Decomposition Products: Toxic gases emitted under combustion include oxides of carbon, iron and sulfur.                  |  |  |  |  |
|       | Hazardous Polymerization: [X] Will not occur [] Will occur   |  |  |  |  |
| VII.  | SPILL, LEAK, AND DISPOSAL PROCEDURES   |  |  |  |  |
|       | If material is spilled: Remove all sources of ignition. Wear NICHE/OSHA approved dust respirators. Follow OSHA regulations         |  |  |  |  |
|       | for respirator use. (See 29 CFR 1910.134.) Shovel or sweep up and reuse. Use approved liquid spray to reduce dust when             |  |  |  |  |
|       | sweeping or shoveling.   |  |  |  |  |
|       | Waste Disposal Method: Dispose of contaminated product, empty containers and materials used in cleaning up spills and leaks        |  |  |  |  |
|       | in a manner approved for this material. Consult appropriate federal, state and local regulatory agencies to ascertain proper       |  |  |  |  |
| VIII. | disposal procedures.  SPECIAL PROTECTION INFORMATION   |  |  |  |  |
| VIII. |  |  |  |  |  |
|       | Protective Equipment Suggested for Outdoor Application:  [X] Impervious Gloves   |  |  |  |  |
|       | [] Impervious Boots [X] Clean Clothing [X] Eye Goggles / Safety Glasses  |  |  |  |  |
|       | Protective Equipment Suggested for Confined Areas:   |  |  |  |  |
|       | [X] Sufficient Ventilation [X] Respirator(use NIOSH/MSHA approved) [X] Dust Mask   |  |  |  |  |
|       | [X] Splash Goggles/Safety Glasses  |  |  |  |  |
|       | [X] Eyewash Station [X] Emergency Shower [] Impervious Apron   |  |  |  |  |
| IX.   | STORAGE AND HANDLING   |  |  |  |  |
| 174.  | Precautions: Store in a cool, dry place if possible. Separate from other pesticides, fertilizers, seed, feed, foodstuffs, and away |  |  |  |  |
|       | from drains, sewers, and water sources.  |  |  |  |  |
|       | Other Precautions: Store in original, sealed containers. Keep containers closed when not in use. Do not spill on skin or ge        |  |  |  |  |
|       | in eyes. Do not allow storage temperatures to exceed 120°F.  |  |  |  |  |
| Χ.    | FEDERAL REGULATORY INFORMATION:  |  |  |  |  |
|       | TITLE III; SEC. 311/312 HAZARD CATEGORIES  |  |  |  |  |
|       | Y Immediate (acute) Health SEC 302: NA   |  |  |  |  |
|       | N Delayed (Chronic) Health SEC 313: NA   |  |  |  |  |
|       | N Fire CERCLA RQ: 1000 lbs (Iron sulfate)  |  |  |  |  |
|       | N Sudden Release of Pressure CAA RQ: NA  |  |  |  |  |
|       | N Reactivity   |  |  |  |  |
|       | EPA Reg. No.: NA   |  |  |  |  |

HM 181 Shipping Name: Not Regulated. NA = Not Applicable ND = Not Determined

Preparation and distribution of this Material Safety Data Sheet done by LESCO, Inc., 15885 Sprague Road, Strongsville, Ohio 44136-1799, pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200).

The information contained herein is based on available data. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof; and you should make your investigation to determine safety for the use you contemplate. LESCO, Inc. makes no warranty of merchantability of fitness for a particular use, nor is there any other express or implied warranty except as may be specifically provided otherwise on product.

LESCO, Inc. assumes no responsibility or liability for any incidental or consequential damages whether related to personal injury or property damage, to vendees, users or third parties, caused by the material; and LESCO, Inc.'s responsibility is limited to replacement of, or repayment of, the purchase price for the material(s) with respect to which any damages are claimed. All vendees or users assume all risk associated with the use of the material(s).

For further information, contact: LESCO, Inc., • 15885 Sprague Road • Strongsville, Ohio 44136 or (800) 321-5325.